# CONTENTS


NUMBER 1

J. R. RADFORTH: Miecsyslaw Gregory Bekker 1905–1989 . . . . . 1

J. Y. WONG: Passing of an era . . . . 3

W. SÖHNE: In memoriam, M. Gregory Bekker 7

A. SOLTYNSKI: To the memory of Prof. Dr M. Gregory Bekker . . . . . 9

**Technical Articles**

T. MURO: Wear rate characteristics of heavy dump truck tyres . . . . . 11

P. A. DUDZIŃSKI: Design characteristics of steering systems for mobile wheeled earthmoving equipment . . . . . 25

P. BOONSINSUK, G. J. IRWIN, R. N. YONG and F. CAPORUSCIO: Preconditioning of deep snowpack for off-road vehicle mobility . . 83

**Summaries**

French . . . . . 101

German . . . . . 102

Announcements . . . . . 105

NUMBER 2

**Technical Articles**

B. F. JAKOBSEN and A. R. DEXTER: Prediction of soil compaction under pneumatic tyres. . 107

T. C. THAKUR and R. J. GODWIN: The present state of force prediction models for rotary powered tillage tools . . . . . 121

A. T. ABEBE, T. TANAKA and M. YAMAZAKI: Soil compaction by multiple passes of a rigid wheel relevant for optimization of traffic . . 139

S. K. UPADHYAYA, D. WULFSOHN and G. JUBBAL: Traction prediction equations for radial ply tyres . . . . . 149

I. WÄSTERLUND: Strength components in the forest floor restricting maximum tolerable machine forces . . . . . 177

# CONTENTS (continued)


**Book Review** — Tractors and their power units, by LILJEDAHL, TURNQUIST, SMITH and HOKI, Reviewed by R. D. WISMER . . . . . 183

**Summaries** — French . . . . . 185

German . . . . . 187

Announcements . . . . . 191

NUMBER 3/4

**Technical Articles** — ZENG DECHAO, ZHU YONGHUA and ZHOU YIMING: A mathematical model for sideways overturning performance of tractor and trailer combinations . . . . . 193

J. A. LINES and N. A. YOUNG: A machine for measuring the suspension characteristics of agricultural tyres . . . . . 201

CHANG-DE ZHANG and SHIN-MIN SONG: Gaits and geometry of a walking chair for the disabled 211

V. M. SALOKHE, G. RAJARAM and D. GEE-CLOUGH: Limitations of passive earth pressure theory for cage wheel lug and tine force predictions . . . . . 235

T. MURO: Tractive performance of a bulldozer running on weak ground . . . . 249

**Technology Showcase** — V. M. SALOKHE and D. GEE-CLOUGH: Applications of enamel coating in agriculture . 275

**Technical Note** — K.-J. MELZER: Don't forget the update! . . 287

**Summaries** — French . . . . . 289

German . . . . . 291